



## Reservoir Fluid Properties: Preparation for Reservoir Engineering and Simulation Studies - RFP

### COURSE

#### About the Course

This course goes beyond the usual description of reservoir fluid properties. The underlying purpose is to be able to prepare the most accurate possible set of values of fluid properties for use in other engineering calculations. An understanding of the advantages of the application of both laboratory data and correlations will be provided. Extensive exercises are used to illustrate the principles and to test the consistency of measured data. Accordingly, participants are encouraged to bring their own PVT laboratory data to deconstruct in class. Equations of State calculations are introduced, and a tuning exercise is conducted on commercial software.

This course covers both conventional and unconventional reservoirs.

*"Library of correlations was very impressive. Discussion of PVT and QCs was directly applicable to my job."* - Reservoir Engineer, United States

*"Overall a great course with a lot of practical application."* - Reservoir Engineer, United States

#### Target Audience

Reservoir, production and facilities engineers who have a need to model the flow of oil, gas and water through reservoirs, wellbores, and surface facilities.

#### You Will Learn

Participants will learn how to:

- Identify the type of fluid in a particular reservoir and predict how that fluid will behave during production
- Read and QC PVT Reports
- Use laboratory data to determine values of fluid properties for use in engineering calculations, including Equation of State
- Use correlations to determine values of fluid properties in the absence of laboratory data
- Select the best available fluid property correlations for oils, gases, and oilfield waters
- Shape PVT data to get the best results out of analytical and numerical software

#### Course Content

- Fluid fundamentals
- Dry gas models
- Brine models
- Wet gas models
- Dead oil models
- Black oil models
- Volatile oil models
- Gas condensate models
- Fluid sampling
- Laboratory tests
- Reading a PVT report
- Quality checks on a PVT report
- Corrections to laboratory data
- Equations of State
- Tuning Equations of State

## Product Details

Categories: [Upstream](#)

Disciplines: [Reservoir Engineering](#)

Levels: [Foundation](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [PetroSkills Specialist](#) [Richard Henry](#)